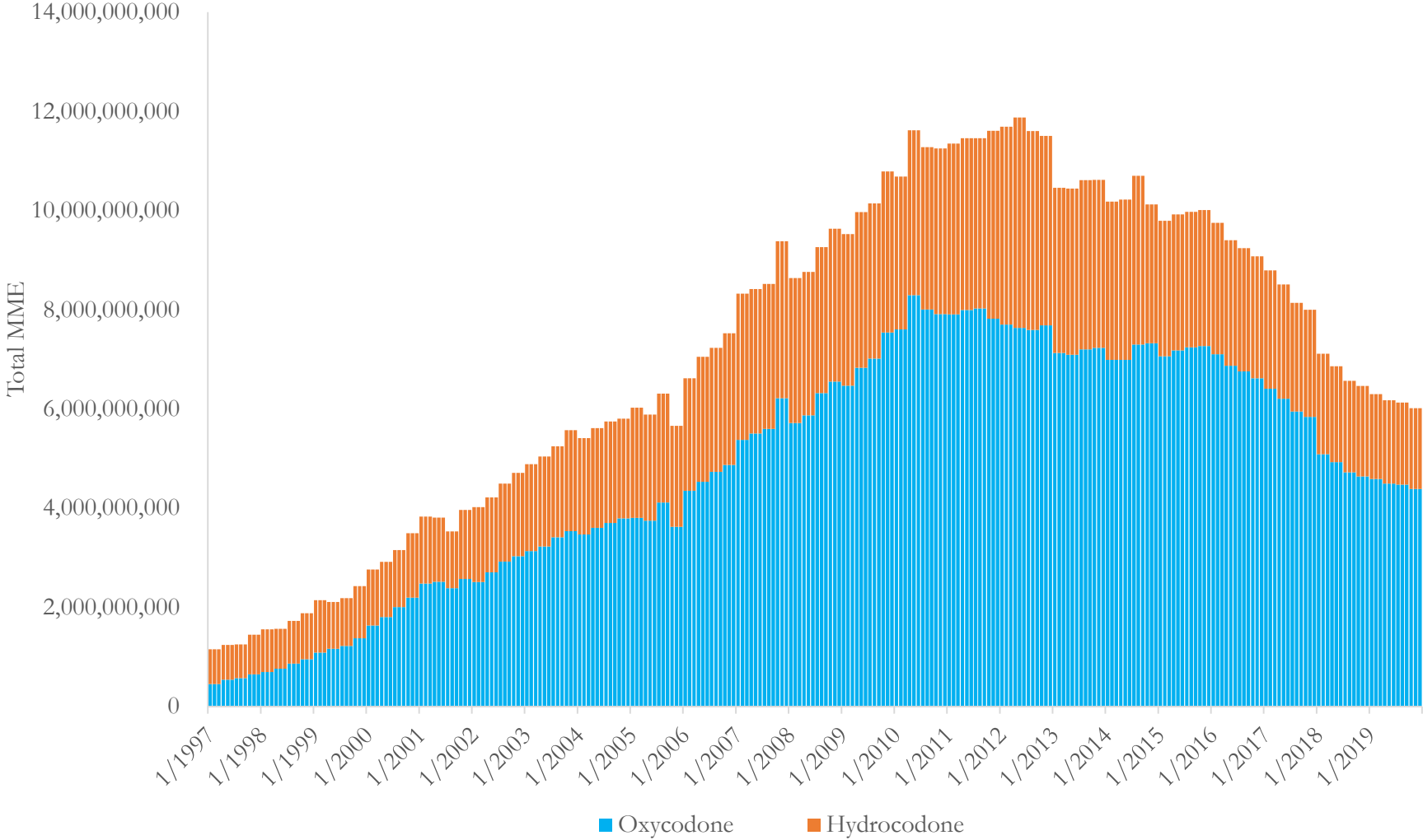
			
Drug Name	Drug Code	Total Shipments in Dosage Unit		Average Annual Shipment Per Capita		Total Shipments in Dosage Unit		Average Annual Shipment Per Capita		Total Shipments in Dosage Unit		Average Annual Shipment Per Capita	
Hydrocodone	9193	71,498,484,824	52.7%	25.72		817,448,711	59.5%	49.20		68,179,000	53.3%	75.80	
Oxycodone	9143	39,443,630,888	29.1%	14.19		379,713,098	27.6%	22.85		41,632,500	32.6%	46.28	
<b>Oxycodone and Hydrocodone</b>		<b>110,942,115,712</b>	<b>81.8%</b>	<b>39.90</b>		<b>1,197,161,809</b>	<b>87.1%</b>	<b>72.05</b>		<b>109,811,500</b>	<b>85.9%</b>	<b>122.08</b>	
Morphine	9300	6,160,024,567	4.5%	2.22		43,585,618	3.2%	2.62		5,675,899	4.4%	6.31	
Codeine	9050	5,544,062,787	4.1%	1.99		34,256,255	2.5%	2.06		2,132,655	1.7%	2.37	
Hydromorphone	9150	2,508,943,791	1.8%	0.90		13,355,276	1.0%	0.80		982,178	0.8%	1.09	
Fentanyl	9801	827,665,591	0.6%	0.30		5,760,853	0.4%	0.35		693,654	0.5%	0.77	
Oxymorphone	9652	603,913,954	0.4%	0.22		7,642,680	0.6%	0.46		789,860	0.6%	0.88	
Tapentadol	9780	341,800,982	0.3%	0.12		1,752,720	0.1%	0.11		140,100	0.1%	0.16	
Meperidine	9230	277,898,650	0.2%	0.10		909,825	0.1%	0.05		28,500	0.0%	0.03	
Dihydrocodeine	9120	35,923,889	0.0%	0.01		308,715	0.0%	0.02		6,857	0.0%	0.01	
Levorphanol	9220L	12,966,499	0.0%	0.00		9,600	0.0%	0.00		4,200	0.0%	0.00	
Opium, Powdered	9639	6,413,324	0.0%	0.00		66,768	0.0%	0.00		10,980	0.0%	0.01	
<b>Total Non-Treatment Drug</b>		<b>127,261,729,745</b>	<b>93.8%</b>	<b>45.77</b>		<b>1,304,810,118</b>	<b>94.9%</b>	<b>78.53</b>		<b>120,276,383</b>	<b>94.0%</b>	<b>133.71</b>	
<b>Treatment Drug</b>													
Methadone	9250B	6,591,133,464	4.9%	2.37		41,234,700	3.0%	2.48		4,991,700	3.9%	5.55	
Buprenorphine	9064	1,798,787,322	1.3%	0.65		28,908,429	2.1%	1.74		2,634,828	2.1%	2.93	
<b>Grand Total</b>		<b>135,651,650,530</b>	<b>100.0%</b>	<b>48.79</b>		<b>1,374,953,247</b>	<b>100.0%</b>	<b>82.76</b>		<b>127,902,911</b>	<b>100.0%</b>	<b>142.19</b>	

Data source: Source: ARCOS, U.S. Census Bureau  
Expert Report, Table 9; Appendix 6, Page 3, 7



2 Drugs Oxycodone Hydrocodone mg MME



Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.



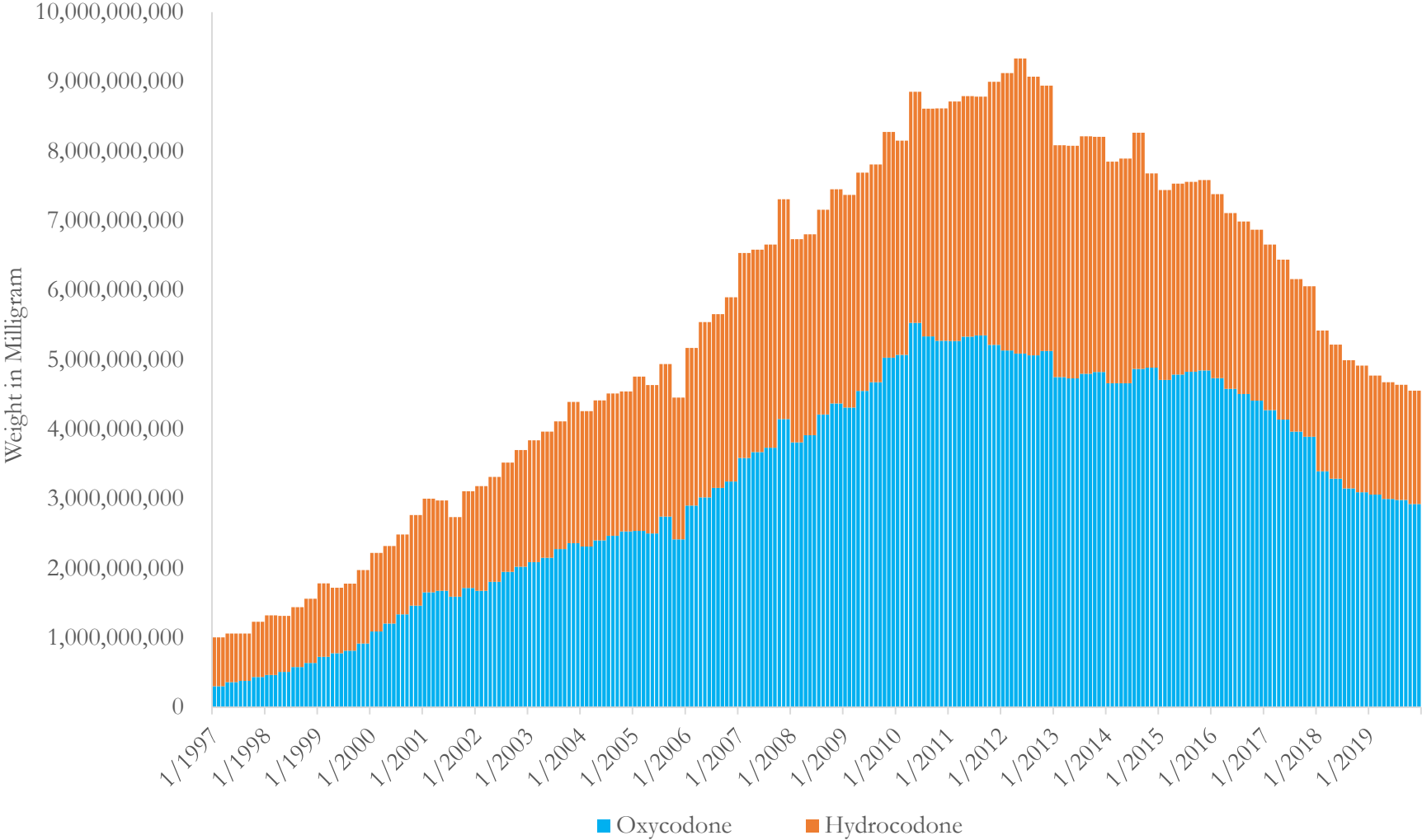
2 Drugs

Oxycodone

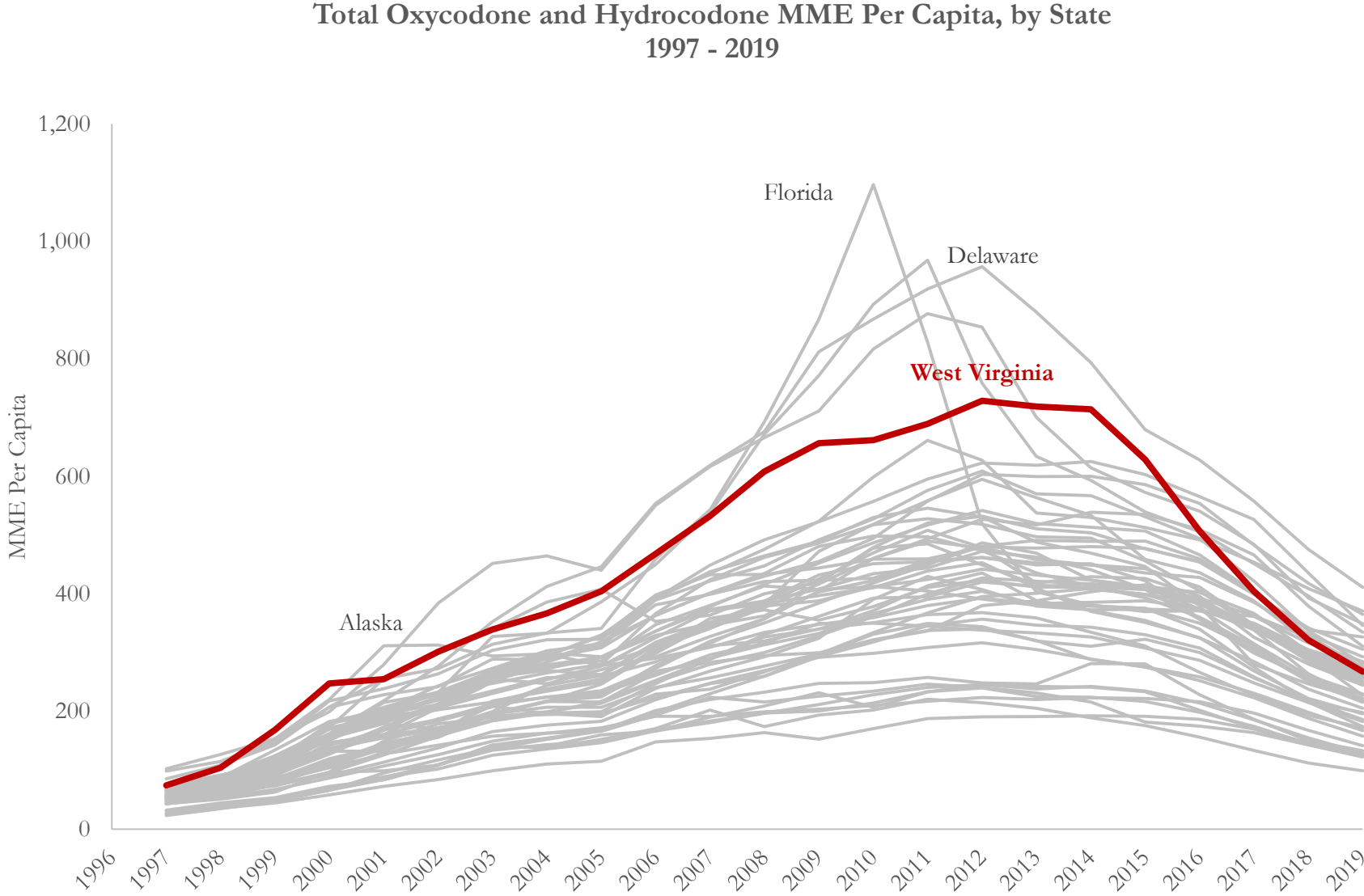
Hydrocodone

mg

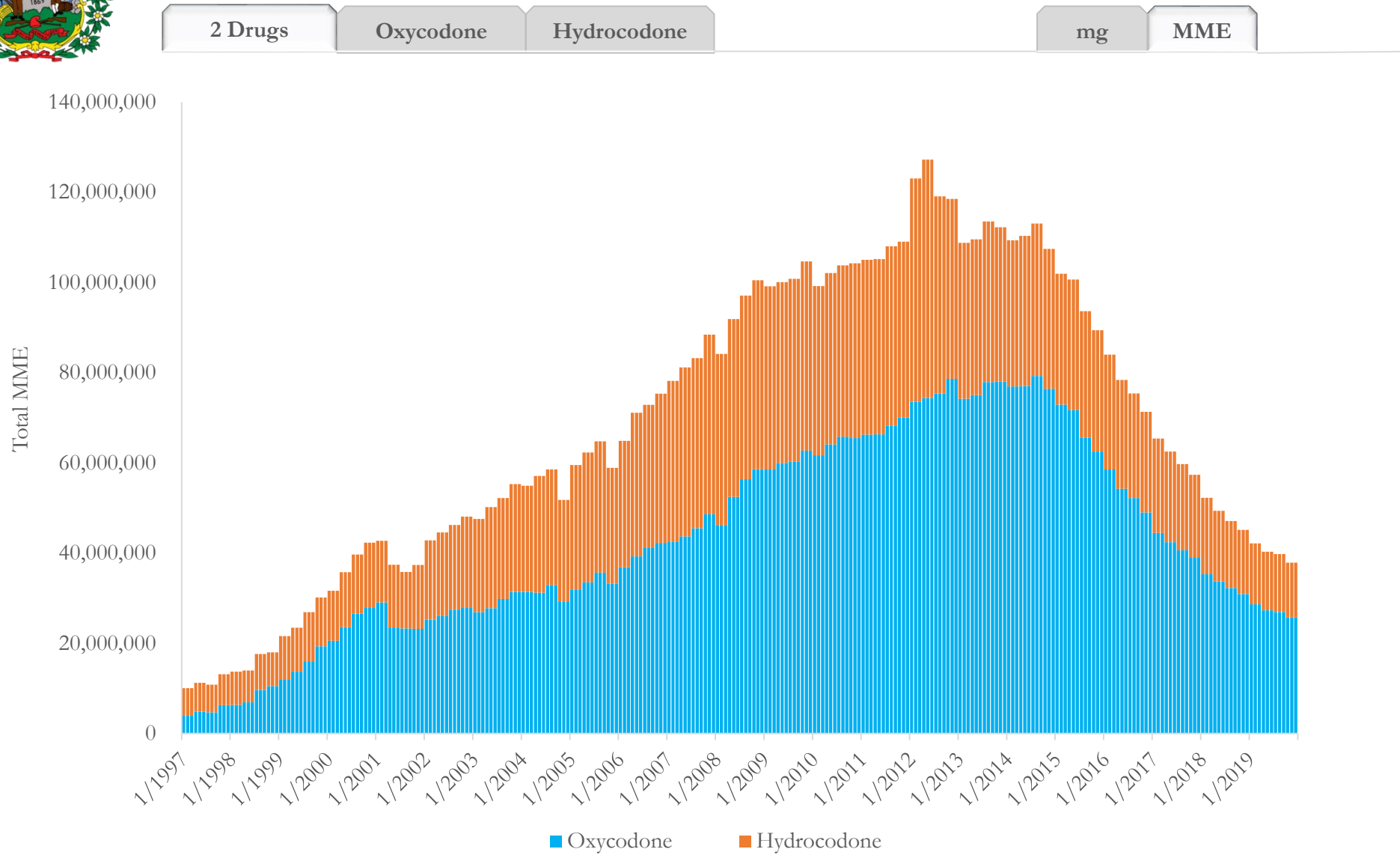
MME



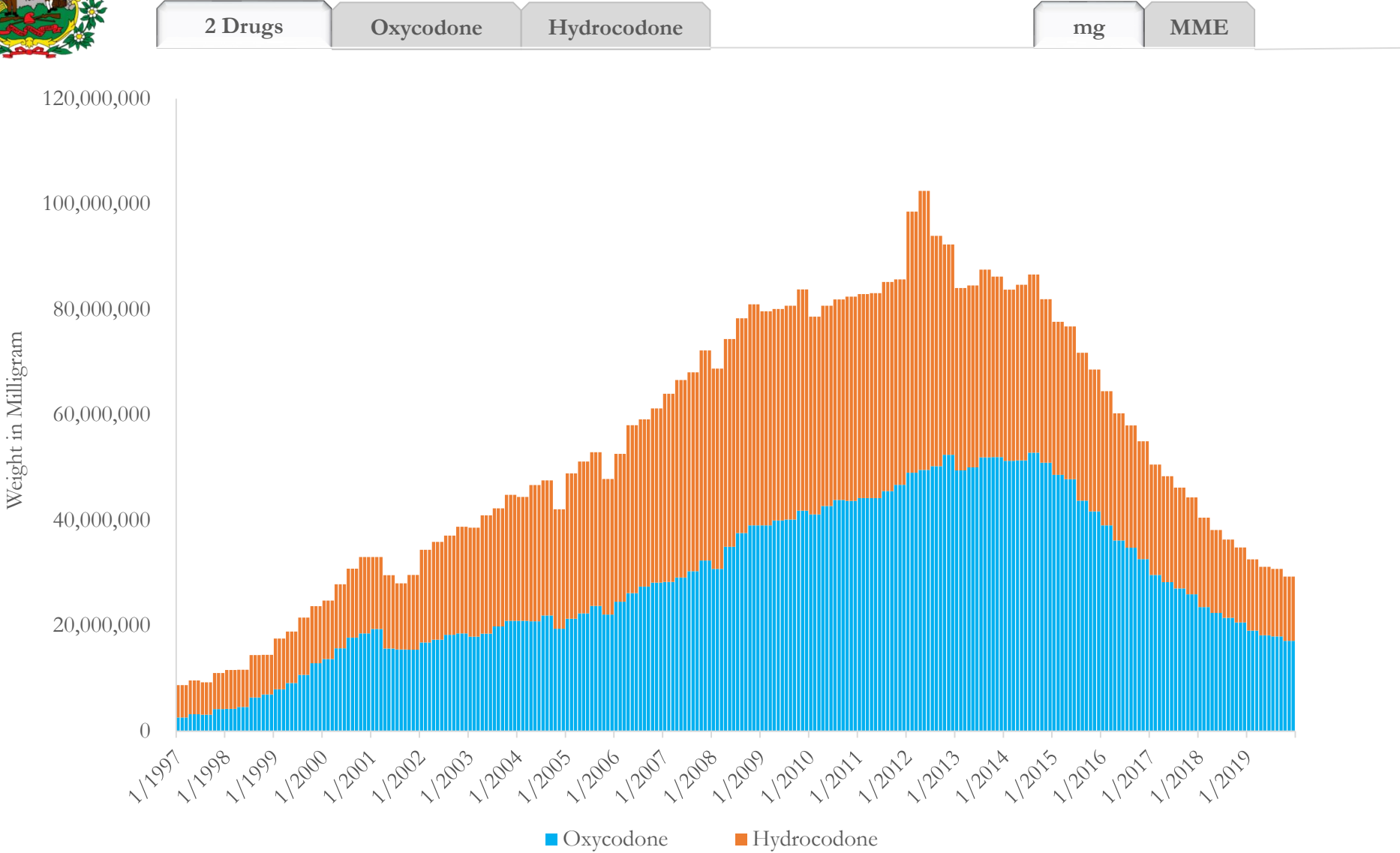
Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.



Source: ARCOS (2006-2014), otherwise ARCOS Retail Drug Summary Reports ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html));  
United States Census Bureau (<https://www.census.gov/>)

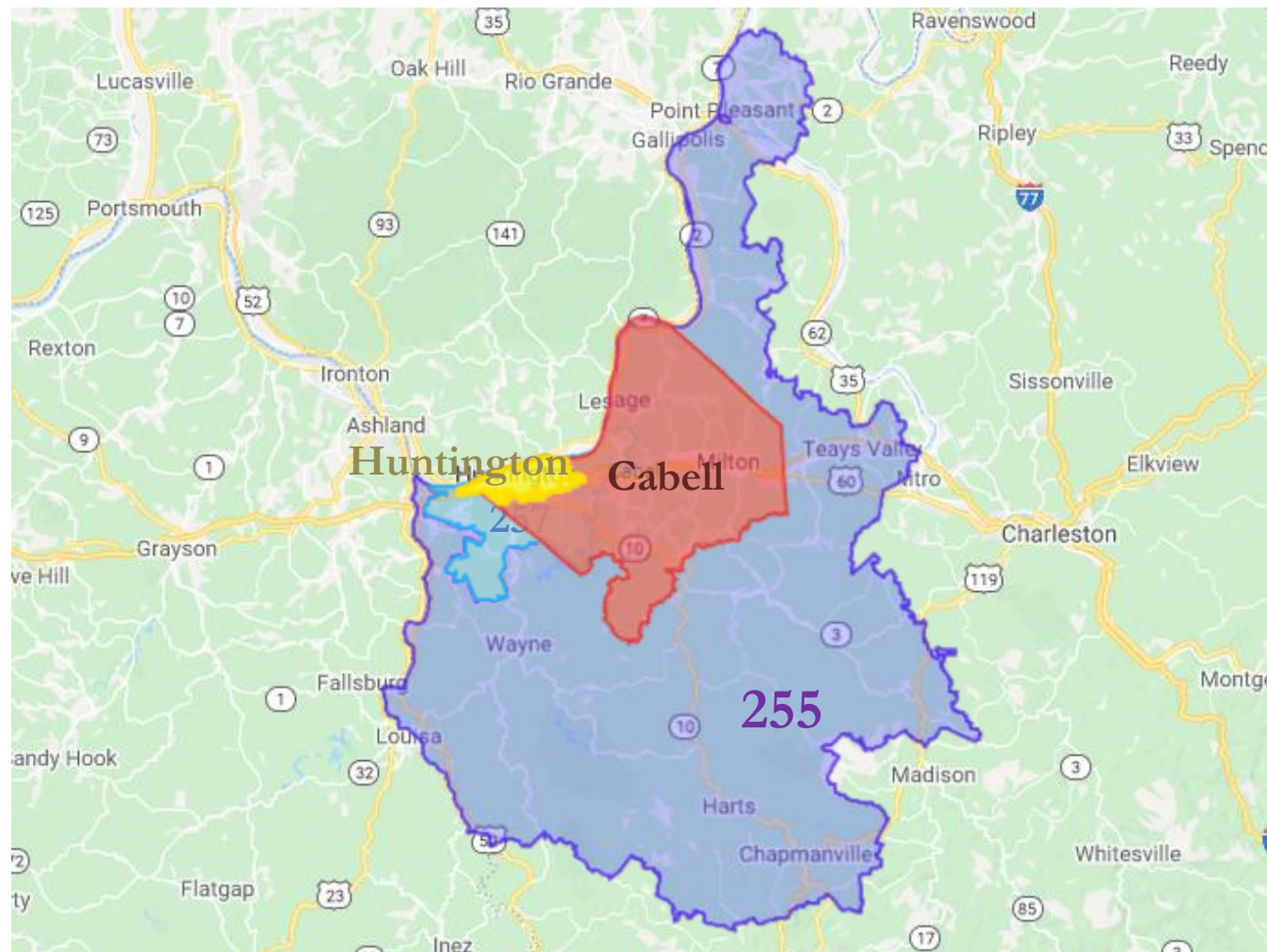


Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.



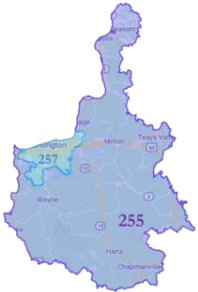
Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.

**Map of Zip Codes 255 and 257**  
**Cabell County: Red Area**  
**The City of Huntington: Yellow Area**

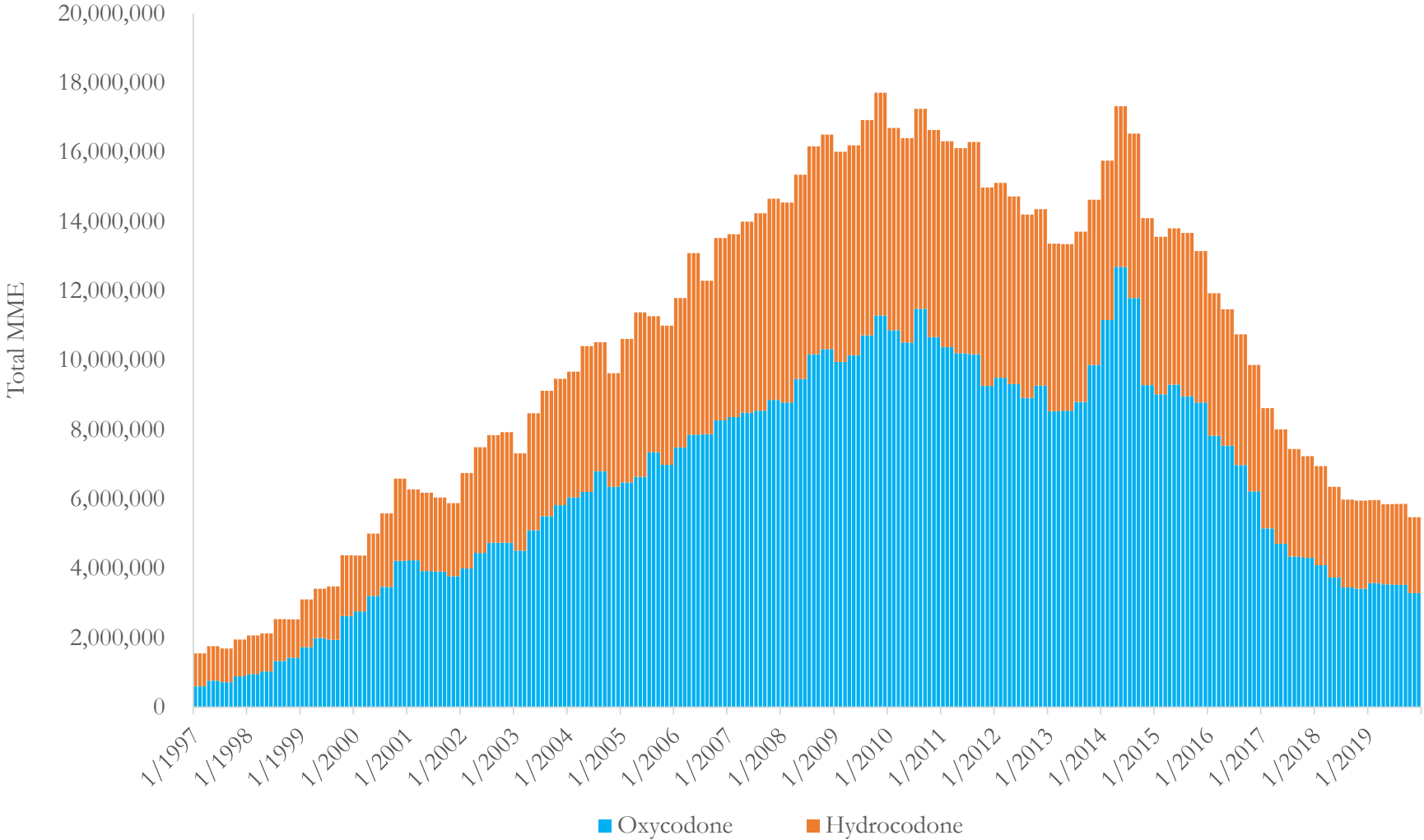


Source: [www.zeemaps.com](http://www.zeemaps.com)

Appendix 8

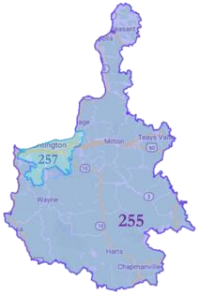


All Seller Oxycodone and Hydrocodone Distribution into Zip Code 255 and 257

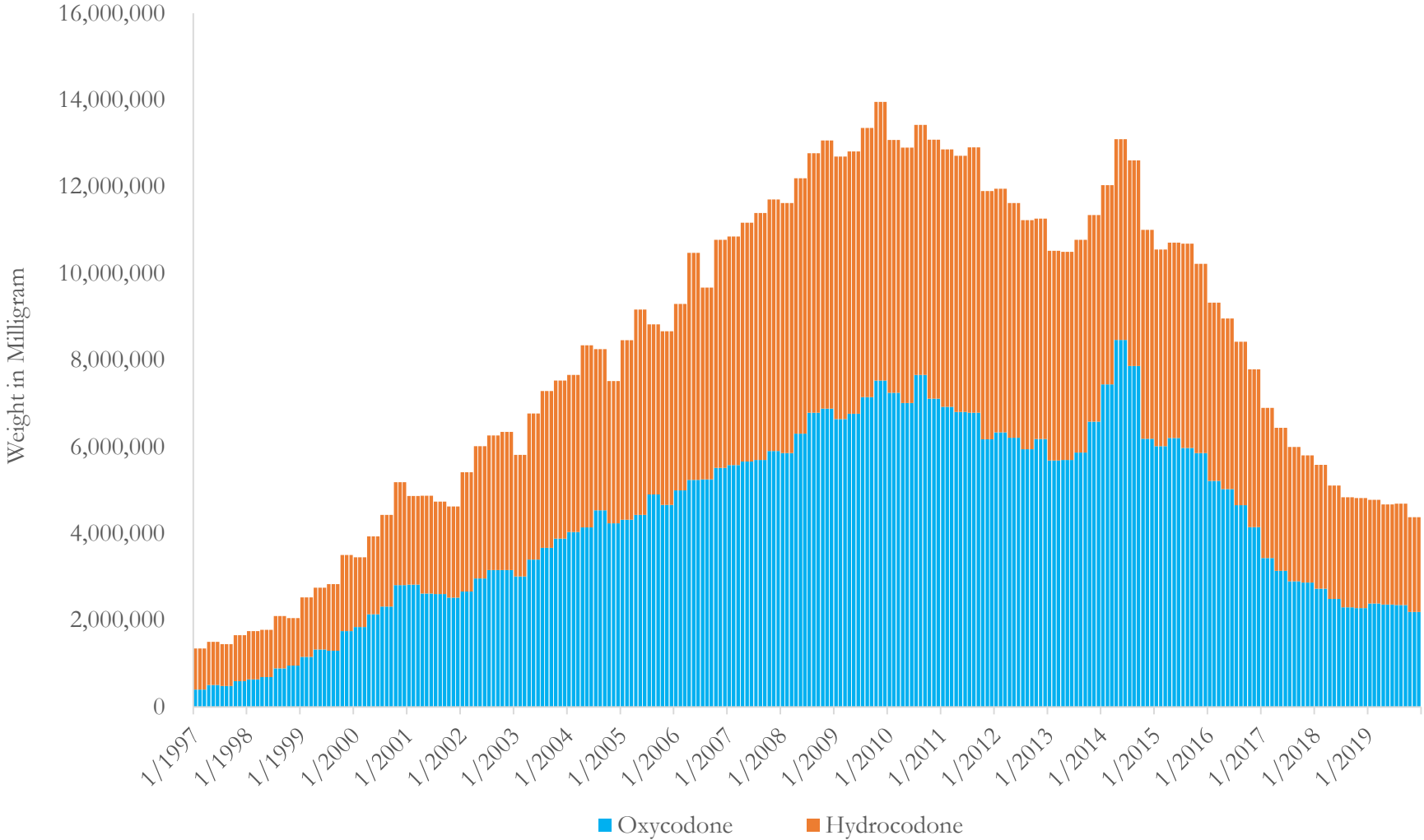


Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.








All Seller Oxycodone and Hydrocodone Distribution into Zip Code 255 and 257






Source: ARCOS Retail Drug Summary Reports (“RDSR”) ([https://www.deadiversion.usdoj.gov/arcos/retail\\_drug\\_summary/index.html](https://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html)).  
RDSRs contain only quarterly, 3-digit zip-code level information.

Oxycodone and Hydrocodone, 2006-2014




Region	 308,923,291			 1,846,064			 99,946		
Average Population	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit
Buyer Business Activity			Per Capita			Per Capita			Per Capita
Chain Pharmacy	61,683,576,521	55.6%	22.19	540,661,020	45.2%	32.54	38,867,920	35.4%	43.21
Retail Pharmacy	38,852,163,314	35.0%	13.97	574,272,253	48.0%	34.56	48,652,390	44.3%	54.09
<b>Retail and Chain Pharmacy Total</b>	<b>100,535,739,835</b>	<b>90.6%</b>	<b>36.16</b>	<b>1,114,933,273</b>	<b>93.1%</b>	<b>67.11</b>	<b>87,520,310</b>	<b>79.7%</b>	<b>97.30</b>
Hospital/Clinic	3,514,226,763	3.2%	1.26	23,173,778	1.9%	1.39	4,114,610	3.7%	4.57
Hosp/Clinic-VA	2,044,842,410	1.8%	0.74	44,212,100	3.7%	2.66	17,623,110	16.0%	19.59
M/O Pharmacy	1,725,288,012	1.6%	0.62	13,636,080	1.1%	0.82	426,200	0.4%	0.47
Pharmacy - Fed	1,600,289,289	1.4%	0.58	0	0.0%	0.00	0	0.0%	0.00
Practitioner	618,013,266	0.6%	0.22	1,131,302	0.1%	0.07	125,618	0.1%	0.14
Hosp/Clinic- Mil	473,393,453	0.4%	0.17	0	0.0%	0.00	0	0.0%	0.00
Central Fill Pharmacy	144,800,050	0.1%	0.05	0	0.0%	0.00	0	0.0%	0.00
Hosp/Clinic Fed	133,453,644	0.1%	0.05	10,430	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/30	73,307,345	0.1%	0.03	29,168	0.0%	0.00	232	0.0%	0.00
Practitioner-DW/100	55,830,144	0.1%	0.02	11,744	0.0%	0.00	1,206	0.0%	0.00
Practitioner-DW/275	9,348,531	0.0%	0.00	16,402	0.0%	0.00	34	0.0%	0.00
MLP-Physician Assistant	7,170,553	0.0%	0.00	1,814	0.0%	0.00	40	0.0%	0.00
Pharmacy- Mil	2,554,140	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Nurse Practitioner	2,266,233	0.0%	0.00	5,018	0.0%	0.00	140	0.0%	0.00
MLP-Nurse Practitioner-DW/30	456,783	0.0%	0.00	400	0.0%	0.00	0	0.0%	0.00
MLP-Physician Assistant-DW/30	419,435	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Naturopathic Physician	290,955	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Teaching Institution	207,450	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Optometrist	92,160	0.0%	0.00	300	0.0%	0.00	0	0.0%	0.00
Practitioner-Military	38,610	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Canine Handler	23,100	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Comp/Maint/Detox	18,500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Animal Shelter	16,300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Ambulance Service	9,935	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maint & Detox	7,400	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Automated Dispensing System	4,560	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Detoxification	3,100	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maintenance	1,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Physician Assistant-DW/100	618	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Chain Hosp/Clinic	600	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Nurse Practitioner-DW/100	538	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Dept Of State	500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Military	500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
<b>Grand Total</b>	<b>110,942,115,712</b>	<b>100.0%</b>	<b>39.90</b>	<b>1,197,161,809</b>	<b>100.0%</b>	<b>72.05</b>	<b>109,811,500</b>	<b>100.0%</b>	<b>122.08</b>

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 12. Buyer Business Activity is based on ARCOS.

Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
Pharmacy Type	Total Dosage Unit	%	Annual Dosage Unit Per Capita	Total Dosage Unit	%	Annual Dosage Unit Per Capita	Total Dosage Unit	%	Annual Dosage Unit Per Capita
Closed Door	6,303,620,922	6.1	2.27	17,237,750	1.5	1.04	6,115,510	7	6.8
Mail Order	3,863,398,238	3.7	1.39	13,636,080	1.2	0.82	426,200	0.5	0.47
Total	10,167,019,160	9.8	3.66	30,873,830	2.7	1.86	6,541,710	7.5	7.27
Chain Pharmacy	61,491,312,431	59.1	22.12	540,645,320	47.9	32.54	38,867,920	44.2	43.21
Retail Pharmacy	32,353,866,035	31.1	11.64	557,050,203	49.4	33.53	42,536,880	48.4	47.29
Total	93,845,178,466	90.2	33.76	1,097,695,523	97.3	66.07	81,404,800	92.6	90.5
Grand Total	104,012,197,626	100	37.41	1,128,569,353	100	67.93	87,946,510	100	97.77




Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 120, 135, 150. Pharmacy Type is based on NPI.

Region	 308,923,291			 1,846,064			 99,946		
Average Population	Total	%	Annual	Total	%	Annual	Total	%	Annual
Buyer Business Activity	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita
Retail Pharmacy	24,960,807,521	45.6%	8.98	444,163,525	64.5%	26.73	44,881,360	56.6%	49.90
Chain Pharmacy	22,532,207,636	41.2%	8.10	171,164,970	24.9%	10.30	12,216,350	15.4%	13.58
<b>Retail and Chain Pharmacy Total</b>	<b>47,493,015,157</b>	<b>86.8%</b>	<b>17.08</b>	<b>615,328,495</b>	<b>89.4%</b>	<b>37.04</b>	<b>57,097,710</b>	<b>72.0%</b>	<b>63.48</b>
Hospital/Clinic	3,121,856,310	5.7%	1.12	23,163,825	3.4%	1.39	4,113,010	5.2%	4.57
Hosp/Clinic-VA	2,029,584,005	3.7%	0.73	44,212,100	6.4%	2.66	17,623,110	22.2%	19.59
Pharmacy – Fed	836,796,630	1.5%	0.30	0	0.0%	0.00	0	0.0%	0.00
M/O Pharmacy	526,888,980	1.0%	0.19	5,854,260	0.9%	0.35	426,200	0.5%	0.47
Hosp/Clinic- Mil	443,223,168	0.8%	0.16	0	0.0%	0.00	0	0.0%	0.00
Hosp/Clinic Fed	132,551,145	0.2%	0.05	10,430	0.0%	0.00	0	0.0%	0.00
Central Fill Pharmacy	108,479,480	0.2%	0.04	0	0.0%	0.00	0	0.0%	0.00
Practitioner	17,032,975	0.0%	0.01	15,100	0.0%	0.00	3,800	0.0%	0.00
Practitioner-DW/100	3,140,050	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Pharmacy- Mil	2,445,940	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/30	2,111,530	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Physician Assistant	180,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Teaching Institution	155,250	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/275	81,400	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Naturopathic Physician	56,500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Comp/Maint/Detox	18,500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-Military	12,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Nurse Practitioner	10,900	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Ambulance Service	7,600	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maint & Detox	7,400	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Automated Dispensing System	4,300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Detoxification	3,100	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maintenance	1,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
<b>Grand Total</b>	<b>54,717,663,320</b>	<b>100%</b>	<b>19.68</b>	<b>688,584,210</b>	<b>100%</b>	<b>41.44</b>	<b>79,263,830</b>	<b>100%</b>	<b>88.12</b>

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 24. Buyer Business Activity is based on ARCOS.






Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
Pharmacy Type	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit
			Per Capita			Per Capita			Per Capita
Closed Door	3,763,046,206	7.7	1.36	14,115,880	2.3	0.85	5,748,560	10	6.39
Mail Order	1,660,042,140	3.4	0.6	5,854,260	0.9	0.35	426,200	0.7	0.47
Total	5,423,088,346	11.1	1.96	19,970,140	3.2	1.2	6,174,760	10.7	6.86
Chain Pharmacy	22,475,979,606	45.9	8.09	171,149,270	27.6	10.3	12,216,350	21.2	13.59
Retail Pharmacy	21,072,084,535	43	7.58	430,063,345	69.2	25.88	39,132,800	68	43.51
Total	43,548,064,141	88.9	15.66	601,212,615	96.8	36.19	51,349,150	89.2	57.09
Grand Total	48,971,152,487	100	17.63	621,182,755	100	37.38	57,523,910	100	63.96

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 468, 483, 510, 570, 585, 612, 672, 687, 714. Pharmacy Type is based on NPI.






Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit
Buyer Business Activity			Per Capita			Per Capita			Per Capita
Retail Pharmacy	9,460,040,375	63.3%	3.40	167,067,805	90.4%	10.06	32,814,520	87.8%	36.48
Chain Pharmacy	3,869,830,760	25.9%	1.39	4,462,640	2.4%	0.27	636,880	1.7%	0.71
<b>Retail and Chain Pharmacy Total</b>	<b>13,329,871,135</b>	<b>89.1%</b>	<b>4.79</b>	<b>171,530,445</b>	<b>92.8%</b>	<b>10.32</b>	<b>33,451,400</b>	<b>89.5%</b>	<b>37.19</b>
Hospital/Clinic	1,162,856,005	7.8%	0.42	10,174,560	5.5%	0.61	3,640,500	9.7%	4.05
Hosp/Clinic- Mil	288,310,885	1.9%	0.10	0	0.0%	0.00	0	0.0%	0.00
M/O Pharmacy	119,989,680	0.8%	0.04	3,176,520	1.7%	0.19	271,400	0.7%	0.30
Central Fill Pharmacy	37,761,625	0.3%	0.01	0	0.0%	0.00	0	0.0%	0.00
Practitioner	5,299,530	0.0%	0.00	4,750	0.0%	0.00	300	0.0%	0.00
Hosp/Clinic Fed	5,257,050	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Pharmacy- Mil	2,445,940	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/100	607,700	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Teaching Institution	99,800	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/30	44,470	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Ambulance Service	7,300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maint & Detox	3,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-Military	900	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
<b>Grand Total</b>	<b>14,952,555,020</b>	<b>100%</b>	<b>5.38</b>	<b>184,886,275</b>	<b>100%</b>	<b>11.13</b>	<b>37,363,600</b>	<b>100%</b>	<b>41.54</b>

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 36. Buyer Business Activity is based on ARCOS.



Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
Pharmacy Type	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita
Closed Door	1,380,107,665	10.2	0.5	5,923,450	3.4	0.36	4,821,260	14.3	5.36
Mail Order	375,659,750	2.8	0.14	3,176,520	1.8	0.19	271,400	0.8	0.3
Total	1,755,767,415	13	0.64	9,099,970	5.2	0.55	5,092,660	15.1	5.66
Chain Pharmacy	3,838,188,680	28.4	1.38	4,449,940	2.5	0.27	636,880	1.9	0.71
Retail Pharmacy	7,899,489,885	58.5	2.84	161,157,055	92.2	9.7	27,993,260	83	31.12
Total	11,737,678,565	86.9	4.22	165,606,995	94.7	9.97	28,630,140	84.9	31.83
Grand Total	13,493,445,980	99.9	4.85	174,706,965	100	10.52	33,722,800	100	37.49

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 468, 570, 672. Pharmacy Type is based on NPI.






Drug Name	Drug Code	2006-2014 Total Shipments in Dosage Unit	6/2002-12/2018 Total Shipments in Dosage Unit	6/2002-12/2018 Total Shipments in Dosage Unit
Hydrocodone	9193	7,068,371,800	149,312,840	23,165,410
Oxycodone	9143	4,669,306,765	85,690,895	13,071,260
Total		11,737,678,565	235,003,735	36,236,670

National/WV/Cabell County and City of Huntington, WV 2006 - 2014: Page 462, 465, 468, 564, 567, 570, 666, 669, 672 of Appendix 10  
West Virginia: Code to Produce\MATLAB on Defendant Data\Other Exhibit Program\Avg\AmerisourceBergen Drug WV Outside ARCOS - Retail.xlsx, AmerisourceBergen Drug WV Outside ARCOS - Chain.xlsx  
Cabell County and Huntington City, WV: Code to Produce\MATLAB on Defendant Data\Input Transactions\AmerisourceBergen Drug.csv








Oxycodone and Hydrocodone, 2006-2014

Region	 308,923,291			 1,846,064			 99,946		
Average Population	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit	Dosage Unit		Dosage Unit
Buyer Business Activity			Per Capita			Per Capita			Per Capita
Chain Pharmacy	8,952,101,271	54.8%	3.22	92,029,040	33.2%	5.54	7,526,960	40.2%	8.37
Retail Pharmacy	6,031,801,281	36.9%	2.17	174,645,360	63.0%	10.51	10,872,190	58.0%	12.09
<b>Retail and Chain Pharmacy Total</b>	<b>14,983,902,552</b>	<b>91.7%</b>	<b>5.39</b>	<b>266,674,400</b>	<b>96.2%</b>	<b>16.05</b>	<b>18,399,150</b>	<b>98.1%</b>	<b>20.45</b>
Hospital/Clinic	1,117,650,850	6.8%	0.40	8,186,595	3.0%	0.49	344,470	1.8%	0.38
Hosp/Clinic- Mil	154,912,283	0.9%	0.06	0	0.0%	0.00	0	0.0%	0.00
M/O Pharmacy	66,918,060	0.4%	0.02	2,277,920	0.8%	0.14	0	0.0%	0.00
Central Fill Pharmacy	13,733,130	0.1%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner	4,186,435	0.0%	0.00	9,550	0.0%	0.00	2,900	0.0%	0.00
Practitioner-DW/100	1,329,540	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Hosp/Clinic Fed	1,111,590	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/30	1,006,980	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Physician Assistant	58,200	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Teaching Institution	18,100	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Automated Dispensing Sys	4,300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Nurse Practitioner	3,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Comp/Maint/Detox	2,300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maintenance	1,000	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Detoxification	900	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maint & Detox	200	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
<b>Grand Total</b>	<b>16,344,839,420</b>	<b>100%</b>	<b>5.88</b>	<b>277,148,465</b>	<b>100%</b>	<b>16.68</b>	<b>18,746,520</b>	<b>100%</b>	<b>20.84</b>

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 48. Buyer Business Activity is based on ARCOS.



Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
Pharmacy Type	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita
Closed Door	638,158,336	4.2	0.23	5,478,280	2	0.33	179,700	1	0.2
Mail Order	120,094,740	0.8	0.04	2,277,920	0.8	0.14			
Total	758,253,076	5	0.27	7,756,200	2.8	0.47	179,700	1	0.2
Chain Pharmacy	8,942,561,601	59.4	3.22	92,026,040	34.2	5.54	7,526,960	40.9	8.37
Retail Pharmacy	5,363,739,065	35.6	1.93	169,170,080	62.9	10.18	10,692,490	58.1	11.89
Total	14,306,300,666	95	5.15	261,196,120	97.1	15.72	18,219,450	99	20.25
Grand Total	15,064,553,742	100	5.42	268,952,320	100	16.19	18,399,150	100	20.45

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 483, 585, 687. Pharmacy Type is based on NPI.






Drug Name	Drug Code	2006-2014 Total Shipments in Dosage Unit	1/1996-5/2018 Total Shipments in Dosage Unit	1/1996-5/2018 Total Shipments in Dosage Unit
Hydrocodone	9193	4,964,688,187	251,041,310	19,590,250
Oxycodone	9143	9,341,612,479	215,969,435	17,687,705
Total		14,306,300,666	467,010,745	37,277,955

National/WV/Cabell County and City of Huntington, WV 2006 - 2014: Page 477, 480, 483, 579, 582, 585, 681, 684, 687 of Appendix 10  
West Virginia: Opioid Project\Opioid Epidemic - CT2\Code to Produce\MATLAB on Defendant Data\Other Exhibit Program\Avg\Cardinal Health WV Outside ARCOS - Chain.xlsx, Cardinal Health  
WV Outside ARCOS - Retail.xlsx; Code to Modify\MATLAB on Defendant Data\Defendant CT2-WV data with DC info\Cardinal Health\_WV\_w\_DC\_str.csv  
Cabell County and Huntington City, WV: Opioid Project\Opioid Epidemic - CT2\Code to Produce\MATLAB on Defendant Data\Input Transactions\ Cardinal Health.csv






Oxycodone and Hydrocodone, 2006-2014

Region	 308,923,291			 1,846,064			 99,946		
Average Population	Total	%	Annual	Total	%	Annual	Total	%	Annual
Buyer Business Activity	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita
Chain Pharmacy	9,710,275,605	41.5%	3.49	74,673,290	33.0%	4.49	4,052,510	17.5%	4.51
Retail Pharmacy	9,468,965,865	40.4%	3.41	102,450,360	45.2%	6.17	1,194,650	5.2%	1.33
<b>Retail and Chain Pharmacy Total</b>	<b>19,179,241,470</b>	<b>81.9%</b>	<b>6.90</b>	<b>177,123,650</b>	<b>78.2%</b>	<b>10.66</b>	<b>5,247,160</b>	<b>22.7%</b>	<b>5.83</b>
Hosp/Clinic-VA	2,029,584,005	8.7%	0.73	44,212,100	19.5%	2.66	17,623,110	76.1%	19.59
Hospital/Clinic	841,349,455	3.6%	0.30	4,802,670	2.1%	0.29	128,040	0.6%	0.14
Pharmacy - Fed	836,796,630	3.6%	0.30	0	0.0%	0.00	0	0.0%	0.00
M/O Pharmacy	339,981,240	1.5%	0.12	399,820	0.2%	0.02	154,800	0.7%	0.17
Hosp/Clinic Fed	126,182,505	0.5%	0.05	10,430	0.0%	0.00	0	0.0%	0.00
Central Fill Pharmacy	56,984,725	0.2%	0.02	0	0.0%	0.00	0	0.0%	0.00
Practitioner	7,547,010	0.0%	0.00	800	0.0%	0.00	600	0.0%	0.00
Practitioner-DW/100	1,202,810	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/30	1,060,080	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Physician Assistant	121,800	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-DW/275	81,400	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Naturopathic	56,500	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Teaching Institution	37,350	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Comp/Maint/Detox	16,200	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Practitioner-Military	11,100	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Nurse Practitioner	7,900	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Maint & Detox	4,200	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
Detoxification	2,200	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
MLP-Ambulance Service	300	0.0%	0.00	0	0.0%	0.00	0	0.0%	0.00
<b>Grand Total</b>	<b>23,420,268,880</b>	<b>100%</b>	<b>8.42</b>	<b>226,549,470</b>	<b>100%</b>	<b>13.64</b>	<b>23,153,710</b>	<b>100%</b>	<b>25.74</b>

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 60. Buyer Business Activity is based on ARCOS.



Oxycodone and Hydrocodone, 2006-2014

Region									
Average Population	308,923,291			1,846,064			99,946		
Pharmacy Type	Total	%	Annual	Total	%	Annual	Total	%	Annual
	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita	Dosage Unit		Dosage Unit Per Capita
Closed Door	1,744,780,205	8.5	0.63	2,714,150	1.5	0.16	747,600	13.8	0.83
Mail Order	1,164,287,650	5.7	0.42	399,820	0.2	0.02	154,800	2.9	0.17
Total	2,909,067,855	14.2	1.05	3,113,970	1.7	0.18	902,400	16.7	1
Chain Pharmacy	9,695,229,325	47.5	3.49	74,673,290	42.1	4.49	4,052,510	75	4.51
Retail Pharmacy	7,808,855,585	38.3	2.81	99,736,210	56.2	6	447,050	8.3	0.5
Total	17,504,084,910	85.8	6.3	174,409,500	98.3	10.5	4,499,560	83.3	5
Grand Total	20,413,152,765	100	7.34	177,523,470	100	10.68	5,401,960	100	6.01

Data source: Source: ARCOS, U.S. Census Bureau  
Appendix 10A, Page 510, 612, 714. Pharmacy Type is based on NPI.



<b>Drug Name</b>	<b>Drug Code</b>	<b>2006-2014 Total Shipments in Dosage Unit</b>	<b>10/2004-12/2018 Total Shipments in Dosage Unit</b>	<b>10/2004-12/2018 Total Shipments in Dosage Unit</b>
Hydrocodone	9193	8,648,487,170	153,798,250	3,738,450
Oxycodone	9143	8,855,597,740	124,836,470	3,986,550
<b>Total</b>		<b>17,504,084,910</b>	<b>278,634,720</b>	<b>7,725,000</b>

National/WV/Cabell County and City of Huntington, WV 2006 - 2014: Page 504, 507, 510, 606, 609, 612, 708, 711, 714 of Appendix 10

West Virginia: Code to Produce\MATLAB on Defendant Data\Other Exhibit Program\Avg\McKesson Corporation WV Outside ARCOS - Chain.xlsx, McKesson Corporation WV Outside ARCOS - Retail.xlsx

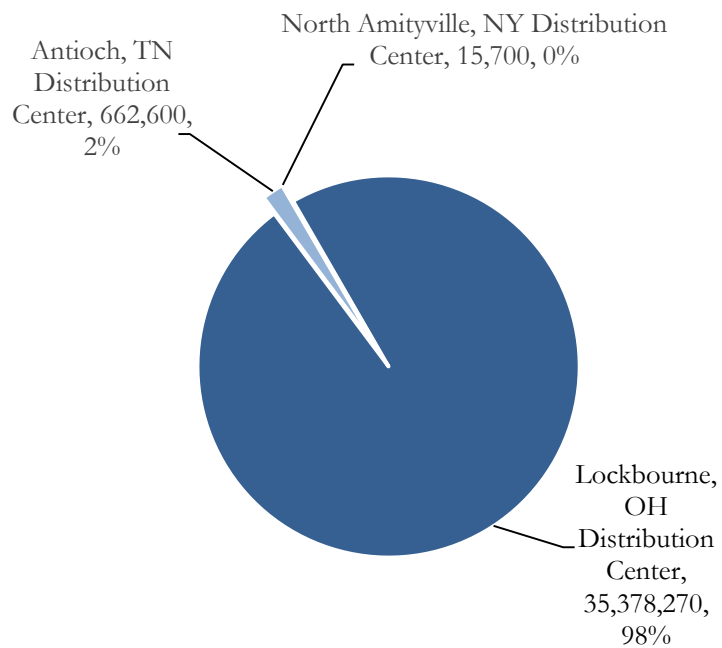
Cabell County and Huntington City, WV: Code to Produce\MATLAB on Defendant Data\Input Transactions\McKesson Corporation.csv



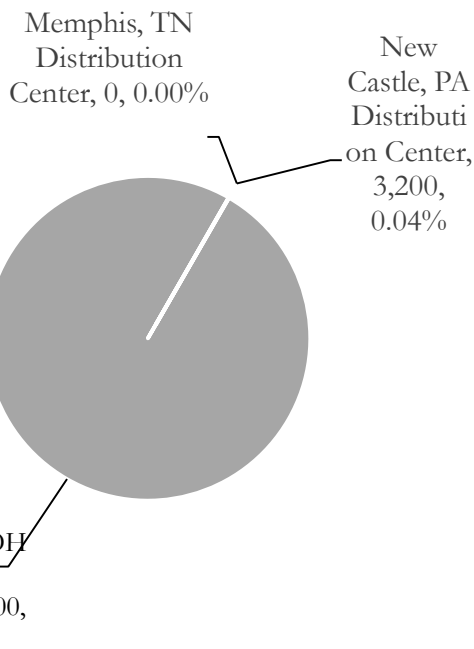
## Oxycodone and Hydrocodone Total Dosage Units from Distributor Defendants to Retail and Chain Pharmacies in Cabell County and the City of Huntington, WV



6/2002 - 12/2018

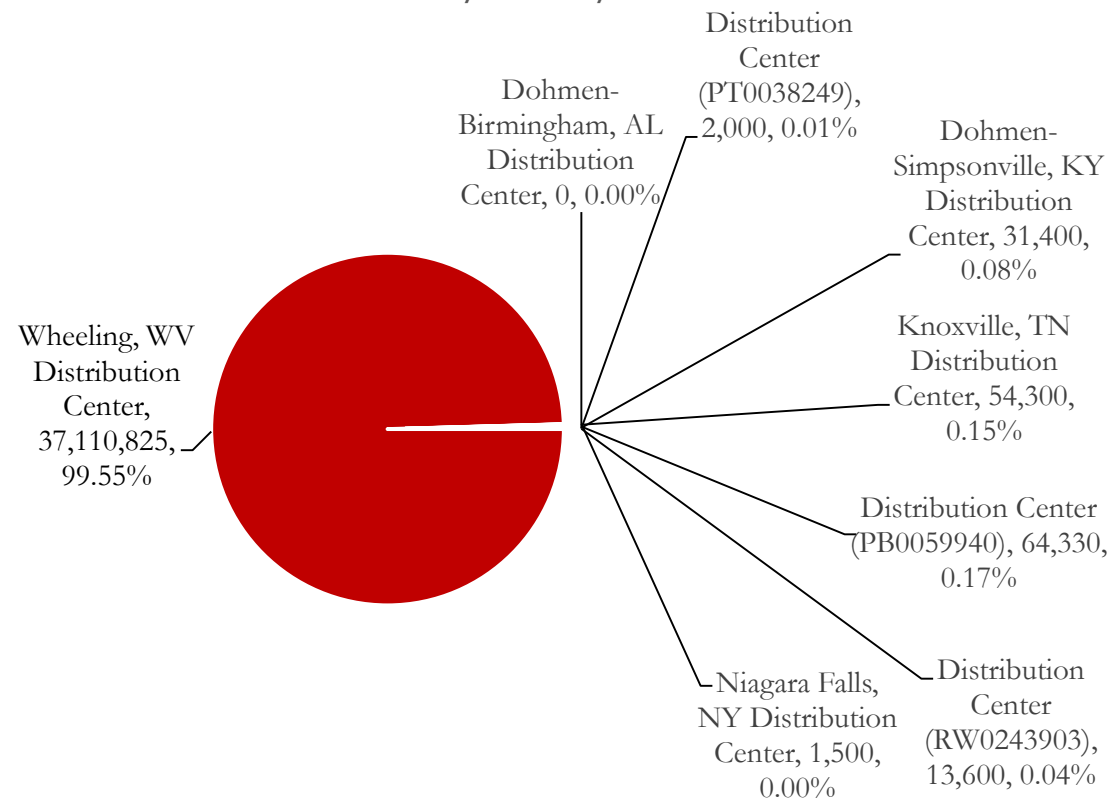


10/2004 - 12/2018



CardinalHealth

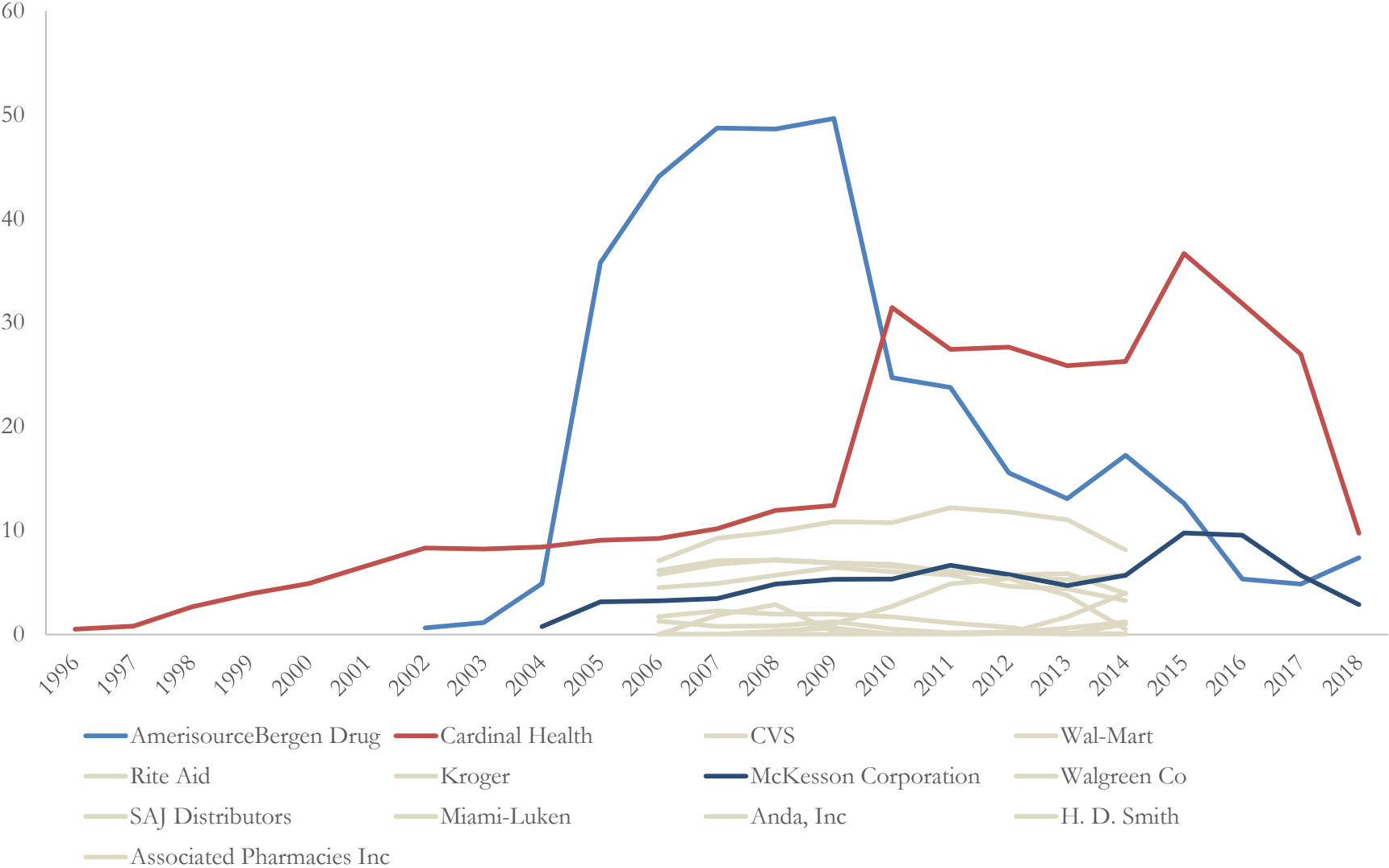
1/1996 - 5/2018



Source: Macro for Appendix 9\data\Output\CT2 Appendix K data.xlsx  
MATLAB on Defendant Data\Defendant CT2-WV data with DC info\AmerisourceBergen Drug\_CT2\_w\_DC\_str.csv  
MATLAB on Defendant Data\Defendant CT2-WV data with DC info\Cardinal Health\_CT2\_w\_DC\_str.csv  
MATLAB on Defendant Data\Defendant CT2-WV data with DC info\McKesson Corporation\_CT2\_w\_DC\_str.csv



**Cabell County and the City of Huntington, WV**  
**Oxycodone and Hydrocodone Total Dosage Units Per Capita by Distributor**  
includes all distributors with greater than 1% market share in any given year





2006 - 2014

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	93,845,178,466	1,097,695,523	81,404,800	33,318,736,612	329,743,645	25,943,160	60,526,441,854	767,951,878	55,461,640
Big 3	43,548,064,141 (46%)	601,212,615 (55%)	51,349,150 (63%)	22,866,516,984 (69%)	266,251,305 (81%)	23,091,360 (89%)	20,681,547,157 (34%)	334,961,310 (44%)	28,257,790 (51%)
AmerisourceBergen Drug	11,737,678,565 (13%)	165,606,995 (15%)	28,630,140 (35%)	4,669,306,765 (14%)	58,350,085 (18%)	10,474,540 (40%)	7,068,371,800 (12%)	107,256,910 (14%)	18,155,600 (33%)
Cardinal Health	14,306,300,666 (15%)	261,196,120 (24%)	18,219,450 (22%)	9,341,612,479 (28%)	124,511,940 (38%)	9,752,960 (38%)	4,964,688,187 (8%)	136,684,180 (18%)	8,466,490 (15%)
McKesson Corporation	17,504,084,910 (19%)	174,409,500 (16%)	4,499,560 (6%)	8,855,597,740 (27%)	83,389,280 (25%)	2,863,860 (11%)	8,648,487,170 (14%)	91,020,220 (12%)	1,635,700 (3%)

2015 - 2018

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Big 3	N/A	246,697,960	18,970,660	N/A	98,321,240	6,206,530	N/A	148,376,720	12,764,130
AmerisourceBergen Drug	N/A	47,464,630	3,409,730	N/A	21,492,510	1,184,620	N/A	25,972,120	2,225,110
Cardinal Health	N/A	109,774,670	12,719,850	N/A	42,206,640	4,169,620	N/A	67,568,030	8,550,230
McKesson Corporation	N/A	89,458,660	2,841,080	N/A	34,622,090	852,290	N/A	54,836,570	1,988,790

2006 - 2018

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Big 3	N/A	847,910,575	70,319,810	N/A	364,572,545	29,297,890	N/A	483,338,030	41,021,920
AmerisourceBergen Drug	N/A	213,071,625	32,039,870	N/A	79,842,595	11,659,160	N/A	133,229,030	20,380,710
Cardinal Health	N/A	370,970,790	30,939,300	N/A	166,718,580	13,922,580	N/A	204,252,210	17,016,720
McKesson Corporation	N/A	263,868,160	7,340,640	N/A	118,011,370	3,716,150	N/A	145,856,790	3,624,490

Source: Page: 114, 117, 120, 129, 132, 135, 144, 147, 150, 462, 465, 468, 477, 480, 483, 504, 507, 510, 564, 567, 570, 579, 582, 585, 606, 609, 612, 666, 669, 672, 681, 684, 687, 708, 711, 714 of Appendix 10;  
Processed Defendant Transactional Data

Opioid Shipment to Retail and Chain Pharmacies, Per Capita in Dosage Unit

2006 - 2014

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	33.75	66.07	90.50	11.98	19.85	28.84	21.77	46.22	61.66
Big 3	15.66	36.19	57.09	8.22	16.03	25.67	7.44	20.16	31.41
AmerisourceBergen Drug	4.22	9.97	31.83	1.68	3.51	11.64	2.54	6.46	20.18
Cardinal Health	5.15	15.72	20.25	3.36	7.49	10.84	1.79	8.23	9.41
McKesson Corporation	6.30	10.5	5	3.19	5.02	3.18	3.11	5.48	1.82

2015 - 2018

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Big 3	N/A	33.84	48.05	N/A	13.49	15.72	N/A	20.35	32.33
AmerisourceBergen Drug	N/A	6.51	8.64	N/A	2.95	3	N/A	3.56	5.64
Cardinal Health	N/A	15.06	32.22	N/A	5.79	10.56	N/A	9.27	21.66
McKesson Corporation	N/A	12.27	7.20	N/A	4.75	2.16	N/A	7.52	5.04

2006 - 2018

Seller	Oxycodone and Hydrocodone			Oxycodone			Hydrocodone		
	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV	National	West Virginia	Cabell County and the City of Huntington, WV
All Sellers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Big 3	N/A	35.47	54.33	N/A	15.25	22.64	N/A	20.22	31.69
AmerisourceBergen Drug	N/A	8.91	24.75	N/A	3.34	9.01	N/A	5.57	15.75
Cardinal Health	N/A	15.52	23.90	N/A	6.97	10.76	N/A	8.54	13.15
McKesson Corporation	N/A	11.04	5.67	N/A	4.94	2.87	N/A	6.10	2.8

Source: Page: 114, 117, 120, 129, 132, 135, 144, 147, 150, 462, 465, 468, 477, 480, 483, 504, 507, 510, 564, 567, 570, 579, 582, 585, 606, 609, 612, 666, 669, 672, 681, 684, 687, 708, 711, 714 of Appendix 10; Processed Defendant Transactional Data